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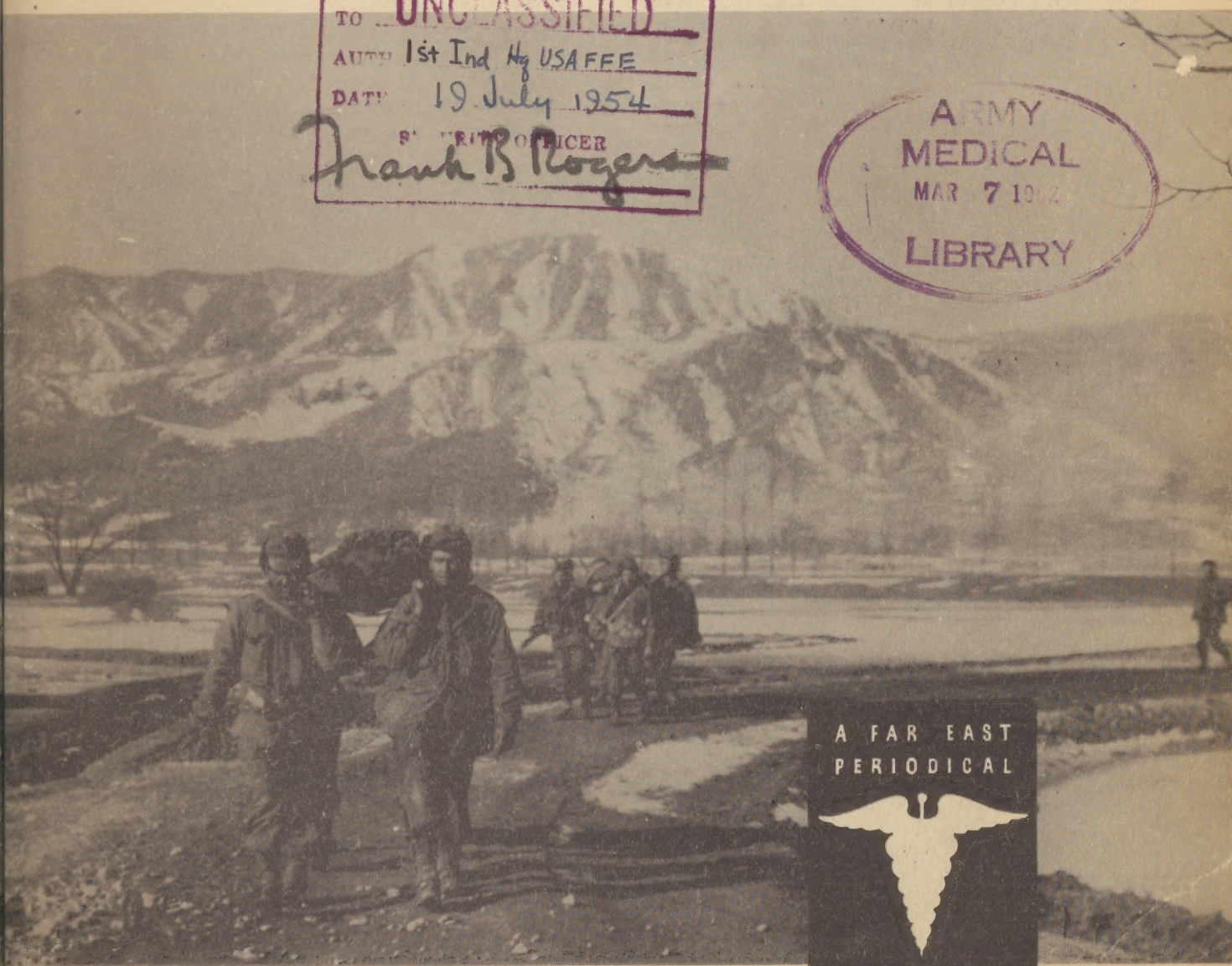

A FAR EAST PERIODICAL OF ARMY MEDICAL SERVICES

MEDICAL SECTION - GHQ - FEC, SCAP AND UNC

APO 500

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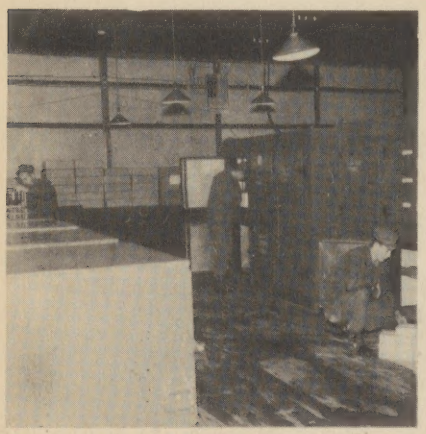
6TH ARMY MEDICAL DEPOT (EUSAK)

Some of the major activities of this medical depot include--

technical or medical maintenance--

optical repair and manufacture--

whole blood receipts, shipments--



and storage including biologicals--

storage of freezable items--

and medicinal gasses.

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THE SURGEON'S Circular Letter

Volume VII - Number 1

JANUARY 1952

General Headquarters
Far East Command
Medical Section
APO 500

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ADMINISTRATIVE

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CHICAGO WOMAN KEY FIGURE IN JAPAN'S PUBLIC HEALTH REHABILITATION

Modern medical education and the application of approved public health methods have resulted in a marked reduction in the mortality rate of tuberculosis, Japan's leading killer, according to Dr. Anna R. Manitoff, of Chicago, chief of medical services in the Public Health and Welfare Division of the GHQ Medical Section in Tokyo.

A distinguished looking woman, with the air of calm efficiency associated with the medical profession, she recently described the manner in which modern medical education is slowly overcoming the didactic teachings of past decades.

"Tuberculosis, to the Japanese way of thinking," she said, "used to be a disgrace. Patients went to the hospital only to die. Now they go to get well."

Dr. Manitoff, a graduate of Boston University, and a resident of Chicago's North Side, has devoted her life to the advancement of medical education and public health. After serving 20 years as an official of the Chicago Public Health Department, she has spent the past six years in Germany and Japan, teaching the modern miracles of medical science and public health.

In October 1947, when Dr. Manitoff arrived in Japan, Tokyo had a population of 5,000,000 and a disease and death rate that reached alarming figures, although continuing medical education and practical assistance already had reduced the figure considerably. Coordination between Japanese medical groups, such as private doctors, hospitals and sanatoria directors, and municipal health departments traditionally was not encouraged.

In her new assignment Dr. Manitoff worked closely with the Tokyo Health Bureau, to which she became advisor and guide in all its undertakings. Here, as in Germany, she was in charge of the control of epidemics, hospitals, and the sanitation of streets and municipal buildings. The procurement of qualified personnel to carry out the multitude of public health programs presented a tremendous task.

Dr. Manitoff recalls with pride the red letter day in March 1948 when she brought about the first combined meeting of various medical groups in Tokyo, the initial conference of this kind in Japan. Attended by more than 400 persons, including members of the Tokyo Medical Association, Tokyo Health Bureau, sanitoria directors, and some Occupation personnel, the meeting formulated plans for coordinating the finding, reporting, hospitalization, contact-examination and follow-up of tuberculosis patients. From this meeting sprang a council in the city of Tokyo, under the jurisdiction of the governor, which has authority to make regulations and laws for the control of tuberculosis.

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Another important program under the jurisdiction of Dr. Manitoff was insect and rodent control. For centuries, Japanese people believed that rats in their homes were good omens, and it has taken considerable effort to prove that the rat is a health hazard. Under her supervision, hundreds of teams of Japanese, trained by American sanitary engineers, have carried out extermination and control programs against rats, mosquitoes, flies and other pests. These measures have resulted in marked reduction in such diseases as typhus, Japanese B encephalitis and dysentery.

At the time of Dr. Manitoff's arrival, many Tokyo streets were still impassable due to mountains of debris and garbage accumulated since the end of the war. Under her vigorous leadership many of the unnecessary, unsanitary canals which criss-crossed so much of the Tokyo metropolitan area, were filled in.

This resulted in the disposal of debris and the addition of passable streets and new business districts.

One of the best examples of this program's success is the street paralleling the Ginza, Tokyo's Broadway. It was formerly the site of an old stagnant canal. Now, lots are being sold for new business establishments with the revenue going to the city.

Dr. Manitoff's present position, that of chief of medical services, Public Health and Welfare Division, Medical Section, General Headquarters, SCAP, is a top-level, policy-making post. She is concerned with administrative supervision of Japanese hospitals, medical education, dental affairs, nutrition and nursing affairs. She travels throughout Japan, lecturing about hospital administration and inspecting hospitals, pointing out the good and bad qualities of each and suggesting improvements.

She is currently busy changing and improving conditions for Japanese internes both in their own hospitals and in American hospitals in Japan, where she is arranging opportunities for selected individuals to serve their internship. She also helps in the selection and approval of Japanese doctors, nurses and dentists for fellowships and scholarships at American universities.

Dr. Manitoff entered foreign service in 1945 when she went to Germany as a major in the United States Public Health Service. There she was detailed to the United Nations Relief and Rehabilitation Agency (UNRRA) and given the post of chief medical officer, Third and Fourth United States Districts, American Zone, which included two-thirds of Bavaria. These districts included 200 UNRRA installations, serving 130,000 displaced persons.

The supervision, guidance and teaching of medical officers, nurses and messing officers of the UNRRA organization, composed of personnel from 51 nations, presented an interesting study to Dr. Manitoff.

"I well remember," she said, "the curious backgrounds encountered in my conferences with the professional people of the different UNRRA teams. For instance, one team might have a French doctor, a Danish nurse and a Belgian messing officer."

Added to this, the variety of DP population, with the corresponding technical personnel, created a "hodge-podge" of personalities, she explained.

"We even had a variety of food tastes and habits. We had to cater to national taste and, in some cases, certain religious beliefs," Dr. Manitoff continued.

Looking back on past experiences and reviewing present accomplishments, Dr. Manitoff believes that the medical profession in Japan still has a long way to go. Since most Japanese medical professors instruct from German texts of past years, and patient charts in Japanese hospitals are inscribed in German and Japanese, with a sprinkling of English, such a belief appears to be well founded.

TUBERCULOSIS CONTROL PROGRAM FOR KOREAN CHILDREN NOW UNDER WAY

A massive tuberculosis control program calling for vaccination of more than 250,000 Korean orphans and primary school children is under way in Korea. Headquarters, United Nations Civil Assistance Command, Korea, announced today.

The preventive work will be conducted in Seoul, Pusan, Choju, Taegu, Taejon and Inchon, South Korea's six largest cities, UNCACK officials stated.

Vaccination teams now immunizing children in Seoul are scheduled to complete the project in Inchon by mid-July.

BCG serum and other supplies are being provided by the Civil Assistance Command. The project will be supervised by UNCACK medical personnel.

The ROK Ministry of Health approved and sponsored the program following a recent survey which reported more than 800,000 tuberculosis cases in Korea.

This total is far higher than prewar estimates, ROK officials declared. They said much of the increase is due to extremely poor living conditions in war devastated areas.

Dr. Elise Truelsen of Horning, Denmark, formerly in neurosurgical work at the Copenhagen Municipal Children's Hospital, is general supervisor for UNCACK.

Dr. Truelsen came to Korea last spring as a staff member of the hospital ship Jutlandia. She later joined the UNCACK staff, working in the field of children's medicine.

AIDMEN RECEIVE FIRST SILVER STARS AWARDED IN 45TH DIVISION

Two Army Medical Service aidmen serving with the 45th Division have been awarded the Silver Star for gallantry in action. Both men also share the distinction of having been the first to receive Silver Stars awarded by the division since it was committed to action in Korea.

Sergeants Ora V. Lawton and Henry Ford, both of Medical Company, 180th Infantry Regiment, received their awards as a result of actions against the en-

emy during the latter part of December.

Sgt. Lawton was on a daylight patrol in the vicinity of Tapsang Dong, Korea, on 23 December, when his patrol was met by heavy enemy fire and one man was wounded in both legs. Without hesitation he left his shelter and ran through a torrent of fire to reach the wounded man 200 yards away. "Disregarding the mortar, machine gun and small arms fire falling around him," his citation reads, "Sergeant Lawton proceeded to dress his wounds in an efficient manner. Then realizing the man needed further immediate treatment, Sergeant Lawton calmly lifted him to his shoulder and carried him through the intense fire to a sheltered position."

Sgt. Ford distinguished himself when, on 28 December, the reinforced platoon he was accompanying on patrol, was subjected to intense mortar and sniper fire and three men were seriously wounded before the patrol could find cover. His citation read in part: "With complete disregard for the hostile fire to which he was again subjecting himself, Sergeant Ford ran back to his wounded comrades, dressed their wounds, and supervised their safe evacuation. Only after the last of his fellow soldiers had been moved to safety did Sergeant Ford leave his completely exposed position and return to his own lines."

COLONEL GINN NEW EUSAK SURGEON

Colonel Louis Holmes Ginn, Jr., MC, was announced as the Surgeon, Eighth United States Army in Korea, effective 27 January 1952. He replaces Col. Thomas N. Page, MC, who has been designated the Surgeon, Third Army, with headquarters in Atlanta, Georgia.

Colonel Ginn received his MD from the Medical College of Virginia in 1927, and was subsequently appointed a first lieutenant, Regular Army Medical Corps, in 1928. He attended the Army Medical School and the Medical Field Service School in 1929 and was a graduate of the Command and General Staff School in 1939. Prior to his EUSAK assignment, Colonel Ginn was the Surgeon, Third Army.

ADMINISTRATIVE OFFICERS MEET AT OSAKA

The fifth meeting of medical administrative officers in the Osaka area was held 19 January in the banquet room of the New Osaka Hotel, Osaka, Japan. Sixty-six members and guests, representing the 382d General Hospital, 279th General Hospital, US Army Hospital, 8163d Army Unit, US Army Hospital, 8164th Army Unit, and the Far East Medical Service Specialists School at Camp Shinodayama, were present.

Sponsored by the 382d General Hospital, the meet was preceded by cocktails and dinner. The evening's program was presided over by Lt Colonel Fred Vechnek, Executive Officer, 382d General Hospital, ably assisted by 1st Lieutenant James J. Norton. Major Donald H. Behrens, Plans and Operations Division, Medical Section, General Headquarters, was the key speaker and presented as his topic for discussion "Medical Operations in GHQ."

Inaugurated in August 1951, at the suggestion of Colonel Robert L. Black, present Chief of the Medical Service Corps, the meetings have been held monthly, except for last December. They are designed to provide a means of acquiring a greater circle of friends and acquaintances among Army Medical Service personnel as well as to keep abreast of the latest available administrative information and techniques.

Sponsors for the February meeting will be the 279th General Hospital.

ENTOMOLOGICAL STUDIES IN THE FAR EAST COMMAND
Entomology Section, 406th Medical General Laboratory, APO 500

Probably that Oriental Sage, Confucius, never said half the things that have been attributed to him, and if he did actually say "one picture is worth 10,000 words" he probably had in mind some fine example of Chinese Art. Nevertheless, the truth of that cliche cannot be gainsaid, and in the technical field of biological science the worth of accurate detailed illustrations in conveying ideas as to shape, size, and relationships of component parts probably exceeds the written word to an even greater extent than in that oft-quoted thought. The use of scientific illustrations as a means of complementing descriptive phrases and circumventing language barriers and deficiencies is becoming increasingly common and attests to their value in this respect. Probably nowhere in biology are illustrations more important than in literature concerned with the differentiation of closely related species of insects and other arthropods.

Attempts to trace down the mode of transmission of diseases common to humans and other animals frequently involve studies of parasitic arthropods. Whenever a disease is thought to be transmitted to man from some lower animal by an arthropod, all possibilities must be investigated. If a rodent or rodents are known to be a disease reservoir, these investigations entail a detailed study of the parasites of rodents, in order to learn not only what arthopods are responsible for transmitting the disease to man, but also those that transmit the disease from rodent to rodent. It may be necessary to determine at what time in its life cycle a parasite is capable of transmitting the disease, and at what time it shows a predeliction for associating with humans. Consideration must be given to each active stage of each species of parasite, and in order to avoid confusion in these studies, it is necessary to distinguish these various forms, one from the other, so that the important ones will not be confused with the innocuous, and vice versa. Medical Service personnel faced with the problem of determing the vectors of such diseases as epidemic hemorrhagic fever must conduct such thorough and time consuming studies.

Unfortunately, our knowledge of mites (Acarina), currently considered the number one suspect group as a vector of epidemic hemorrhagic fever, is very fragmentary. We not only do not know what

species may live on rodents, but of those known to parasitize such hosts we know little about their biology, incidence, and distribution. Investigation of the transmission of this disease must include a study of its epidemiology, and attempts to correlate the appearance of the disease in humans with the presence and abundance of potential arthropod vectors. This will entail careful surveys of parasites of rodents, with all the attendant difficulties of identification of mites and other parasites.

The accurate identification of mites, and the differentiation of closely related species, almost invariably entails the examination of minute anatomical structures at magnifications of over 400 diameters. But before a person can proceed intelligently with this type of identification work it becomes necessary to determine, through examination of hundreds of specimens, just what structures are of importance for distinguishing a given species from its close relatives. This means not only careful scrutiny, but also analysis of variation within a species, so that individual differences will not be confused with species differences. Once the limits of variation of a species are well understood it becomes possible to "define" a species so that other specimens of the same species may be identified. It is in connection with this step that scientific illustrations become of particular value and are, literally, worth 10,000 words.

Field units of the Medical Service currently engaged in surveys of rodent parasites are seriously handicapped by the lack of adequately illustrated publications which will enable them to identify the specimens which they obtain. Until such material is identified the results of their labors in the field have little value. They do not know what or how many species they encounter, and whatever information about the biology of these species exists cannot be correlated with their studies. The need for adequately illustrated literature for use of units in the field is recognized. At the request of the Medical Service, the Department of the Army has employed a specialist in mites to come to Japan to assist in the preparation of such aids. This specialist, with the help of seven highly skilled Japanese scientific illustrators, will have as a mission the preparation of technical publications which it is believed will fill the existing need for literature for the use of personnel not specially trained in the taxonomy of mites. Work on the illustrations which will constitute the basic and most valuable part of these publications is already under way at Kyoto, Japan.

The ultimate success of this project will depend to a considerable extent upon how well it is supported by field survey work. Obviously, a publication that treated but a small percentage of the common species encountered would be of little practical value; there would be too many blank spots remaining in the analysis of the mite fauna. In order to take full advantage of the talents of the artists now employed it is hoped and urged that units in the field cooperate by making available for study and illustration representatives of whatever species of mites and fleas they encounter. Such material should be forwarded to the 406th Medical General Laboratory, APO 500, where it will be processed for further study. As soon as possible, an identification service will be established at that organization to assist units in the analysis of collected material. In this way it is hoped that immediate progress can be made in the matter of assembling definitive survey information, and that this procedure will suffice during the interim until publications can be prepared.

SANITATION BATTLE TO AVERT TYPHUS THREAT UNDER WAY IN KOREA

A sanitation battle to defeat the typhus threat in South Korea before it can get started during the February, March, April danger period is being waged at all levels with help from the United Nations Civil Assistance Command, Korea.

Efrain Ribeiro, of Lima, Peru, UNCACK's Sanitation Division chief, said that nearly one million Koreans in congested areas already had been DDT dusted.

Cleanup campaigns now are conducted in major towns and cities approximately every two months, he said. Dusting of refugee camps, prisons, jails, crowded orphanages and schools is scheduled for two or three times during winter months to destroy typhus-bearing lice, Ribeiro added.

UNCACK has a supply of more than two million pounds of 10 percent DDT powder for the program, the sanitation chief said.

"ROK and UNCACK sanitation workers feel that through a combination of the past year's mass typhus immunization program, dusting and general urban area cleanup, the disease can be kept far below the maximum incidence of 14,000 cases among refugees early last year," Ribeiro stated.

The cleanup drives have been hampered to some extent by lack of municipal transportation to haul refuse out of the cities. However, the UNCACK official said, success has been achieved by assembling all available hand and ox carts to remove debris.

"Each family," Ribeiro added, "is responsible for cleanliness of streets, drains, and the general area in which it resides. Disposal is by burning, burying or ocean dumping, according to the city's location."

CASUALTIES AMONG AMEDS PERSONNEL

The cry, "Hey, Medic," has resounded on all the battlegrounds of the Korean peninsula. And the "medics" have responded in a manner worthy of the finest traditions of the service.

Commanders hold to the belief that few troops are combat effective until they have been, so-called, "blooded" -- and medical personnel have been blooded during the current conflict. Recent casualty statistics indicate that the attitude of "whither thou goest, I will go" prevails among combat medical personnel in that where the shooting is the hottest, there, too, is the combat medic. Among enlisted personnel serving on the Korean battlefront only the infantryman and the artilleryman have suffered greater casualties.

AWARDS TO ARMY MEDICAL SERVICE PERSONNEL

The following additional Army Medical Service personnel have been awarded the Distinguished Service Cross, Silver Star, Legion of Merit, Bronze Star Medal with "V", Bronze Star Medal or Commendation Ribbon for exceptional bravery in face of the enemy and meritorious service during the Korean conflict:

DISTINGUISHED SERVICE CROSS

Wisemore, Royal A., Sgt

SILVER STAR

Allen, Theodore L., PFC
Blackburn, Claude T., Sgt
Cromer, Robert P., PFC
Davis, Howard, Sgt
Glasby, Thomas C., Sgt
Graham, Gene G., Pvt
Hall, Dale E., Sgt
Hermanski, Eugene, Sgt
Johnson, Orville D., PFC
LaFrance, George A., Cpl
Maddox, Bill S., Cpl
Martin, Carl, 1st Lt, MSC
Martin, Carl, 2d Lt, MSC
Osgood, Leroy G., PFC
Patterson, James M., Sgt
Sayles, Curtis O., Sgt

LEGION OF MERIT

Mahoney, Elizabeth, Lt Col, ANC
Moursund, Walter N., Col, MC
Wickliffe, Nell, Maj, WMSC
Wunderlich, Frederick, Col, DC

SOLDIER'S MEDAL

Thomas, Everett W., Sgt

BRONZE STAR MEDAL with "V"

Arnold, William L., Cpl
Bickerstaff, Glen R., Pvt
Bryan, William L., Cpl
Chaney, Verne L., Capt, MSC
Coby, James L., PFC
Cole, George C., PFC
Collins, William J., Sgt
Cooley, Marvin M., Cpl
Cromer, Robert P., PFC
Davis, Gerald R., Pvt
Dobson, David A., Jr., 2d Lt, MSC
Esparza, Antonia A., Sgt
Gervais, Francis R., PFC
Higham, David M., Cpl
Holly, A. B., Jr., Sgt
Hudson, Gilbert, Sgt
Logan, Gerald R., PFC
Morgan, Richard Y., 1st Lt, MSC
Reichert, John C., Cpl
Rivera-Carbana, Gui, PFC
Rubenstein, Max, PFC
Runyon, Benjamin F., PFC
Schrader, Rolf E., PFC
Shibata, Chester T., 2d Lt, MSC
Southern, Lee G., Cpl
Street, Paul J., M/Sgt
Williamson, Warren, 1st Lt, MSC
Youmans, Emory A., Cpl

BRONZE STAR MEDAL

Abby, Robert F., SFC
Atencio, John R., PFC
Babcock, Samuel A., Capt, MSC
Baier, Floren J., M/Sgt
Bass, Lewis N., Capt, MSC
Beeler, Thomas T., Jr., Lt Col, MSC
Bernstein, Robert, Lt Col, MSC
Bonilla-Matos, Jose, 2d Lt, MSC
Bos, Gerald W., 1st Lt, MSC
Brooks, John R., 2d Lt, MSC
Bushouse, Arthur A., Maj, MSC
Buzzelli, Frank D., Cpl
Chestnutwood, Jack, 1st Lt, MSC
Coleman, Joseph R., SFC
Collins, Edwin M., Capt, DC
Cox, James D., 1st Lt, MSC
Davis, Daniel E., Sgt
Dickey, Jack D., 1st Lt, MSC
Eaton, Glennon W., PFC
Gilliland, Garland, Sgt
Hall, Robert M., Maj, MSC
Hanson, Godfried N., 1st Lt, MSC
Hohl, James F., Maj, MC
Horrell, Irvin L., 1st Lt, MSC
Husband, Joseph L., SFC
Huth, Verlan, E., 1st Lt, MSC
Iannacone, Anthony, Maj, DC
Kershenblatt, Joseph, Capt, DC
Kidd, Wesley S., Lt Col, MSC
Lawson, Bige, SFC
Lee, George W., Cpl
Lehman, Robert H., Capt, MSC
Lloyd, Thomas S., Jr. Capt, MSC
McGrary, Warren A., Capt, MC
McKeithen, Daniel, Cpl
Miller, Moses, Sgt
Mount, James B., Sgt
Nelson, Carl A., Sgt
Pennington, Hugh A., Capt, MSC
Ramos, Gregorio, Sgt
Regnier, Arthur V., Capt, MSC
Roberts, Hoyt B., Cpl
Schane, Donald R., Cpl
Scott, Malcolm L., Cpl
Silvey, James D., Maj, MSC
Simmons, Milton, Capt, MSC
Sparks, Kenneth R., Sgt
Swanson, Charles T., M/Sgt
Szabo, Ferdinand, F., 1st Lt, MSC
Torres, Jose L., M/Sgt
Trusko, Joseph P., Capt, MSC
Ventimigla, William, Lt Col, MSC
Walls, William H., SFC
Ward, Charles E., Maj, MSC
Wolf, Donald C., Sgt
Zimmerman, Lorenz E., Lt Col, MSC

COMMENDATION RIBBON

Anderson, Jerry J., Cpl
Bender, James R., Cpl
Bookherst, Walter E., Cpl
Bradley, John P., Sgt
Cates, Donald C., Capt, DC
Cohen, Stanley, Capt, MSC
Daughtry, Jack L., Sgt
Edington, Roy D., Sgt
Gelman, Leonard, PFC
Hastings, James F., Sgt
Holmes, James P., PFC
Hubbard, John E., Cpl
Hulse, Warren E., Cpl
Kay, Marion, Sgt
Kidwell, Ercel C., Sgt
Kucharski, Edmund, PFC
Lowe, Gordon W., Sgt
Meyer, Arnold W., Sgt
Middleton, Paul D., Sgt
Mowry, Clair E., Jr., Sgt
Nash, Franklin W., SFC
Pettigrew, Roy L., Sgt
Reed, Kenneth J., Sgt
Saley, John, SFC
Shelby, Preston E., SFC
Thompson, Walter L., Sgt
Veth, Willie L., Cpl

NARCOTICS CONTROL

Section II, Department of the Army Circular No. 102, dated 17 December 1951, is quoted for information and guidance of all concerned:

NARCOTICS CONTROL AT MEDICAL TREATMENT FACILITIES. -

1. Armed Services Medical Materiel, Item 7-029-240, cabinet, medicine, combination type, CRM, has been designed with a small narcotics container spot-welded inside the cabinet. The purpose of this container is to provide an adequate means to safeguard those narcotics which are required on hospital wards for daily usage and for use in dispensaries, out-patient clinics, or infirmaries where small quantities of narcotics must be kept on hand to meet emergency treatment needs. Commanders of medical treatment facilities should utilize this item where narcotic control procedures for this purpose are necessary.

2. Requisitions for this item, for the purposes enumerated above, should be submitted through medical supply channels.

REQUISITIONING OF CODE 17 AND NON-STANDARD ITEMS

Considerable confusion and misunderstanding exists regarding the availability of newly standardized (Code 17) items and the channels through which they may be obtained during the transition from "non-standard" to "standard" on the supply table. Quoted below are the definitions of subject items taken from a Medical Depot Supply Manual:

"A non-standard item is any medical item that is not provided through normal requisitioning and issue channels; in other words, items that are not yet officially listed as being available for issue in the Catalog of Medical Materiel or any current Spare Parts Catalog, Pamphlets or Lists provided installations by Medical Depots."

"Code 17 indicates that the item is newly standardized in the medical service and is in the process of being procured centrally in the Zone of the Interior for world-wide requirements. As soon as stocks are received in Medical Depots, stations will be advised to include these items on the standard requisition submitted by the installation."

It would appear that once the Army has agreed to "adopt" a non-standard item, that item becomes an "orphan" and cannot be requisitioned. This interpretation is erroneous and must be dispelled. Any time that a commercial type "Code 17" item is required for patient care, it may be requisitioned in the same manner as prescribed for non-standard items. It may be obtained and issued provided detailed information as to why the item is required and an explanation of why another standard item will not suffice is included on the requisition. Further, requisitions for "Code 17" items such as the new 15 MA or the new 100 MA x-ray units having military characteristics not found in commercial items must obviously be deferred until stock is available through central procurement.

This procedure is not intended to discourage the use of newly standardized items, but rather to insure that the limited supplies of these items are used where they are most needed and to obtain maximum use of non-standard funds allocated to this command.

RECENT DEPARTMENT OF THE ARMY AND FEC PUBLICATIONS

AR 35-1350, 14 Dec 51: Finance and Fiscal - Pay of Retired Members of the Army

AR 35-1355, 14 Dec 51: Finance and Fiscal - Pay of Members of Uniformed Services Retired for Physical Disability

AR 605-145, C-4, 2 Jan 52: Officers - Transfers, Details, and Assignments

AR 35-1705, C-3, 8 Jan 52: Finance and Fiscal - Pay and Allowances, Members of the Organized Reserve Corps, and Officers, Army of the United States

AR 40-105, 9 Jan 52: Medical Service - Standards of Physical Examination for Commission or Warrant Officer in Regular Army, National Guard of the United States, Army of the United States, and Organized Reserve Corps

AR 40-610, C-1, 9 Jan 52: Medical Service - General Administration of Medical Treatment Facilities

AR 620-90, 15 Jan 52: Civilian Personnel - Employment of Pregnant Women

SR 110-1-1, 26 Oct 51: Motion Picture and Photographic Service - Index of Army Motion Pictures, Kinescope Recordings, and Film Strips

SR 795-200-45, C-2, 6 Dec 51: Supplies for Foreign Aid Programs - Report of Status of Mutual Defense Assistance Program Operations

SR 32-20-1, 7 Dec 51: Clothing and Equipage - Clothing Allowance System

SR 615-20-1, C-3, 10 Dec 51: Enlisted Personnel Service Record

SR 615-25-36, 10 Dec 51: Enlisted Personnel - WAC MOS Assignment

SR 35-1465-5, C-2, 17 Dec 51: Finance and Fiscal - Basic Allowance for Subsistence for Service Members

SR 600-60-1, C-1, 28 Dec 51: Personnel - Insignia

SR 600-450-10, 4 Jan 52: Personnel - Evaluation and Separation for Physical Disability Which Existed Prior to Entry on Active Service

SR 140-180-15, C-1, 8 Jan 52: Organized Reserve Corps - Administration of Benefits Provided by Section 5 of Act of 3 April 1939, as Amended, as Further Amended by Act of 20 June 1949, For Members Who Suffer Injury or Death in Line of Duty While on Active Duty or in Reserve Duty Training.

DA Cir 4, 8 Jan 52: Sec II - Completion of AF Form 183A-1 (Excused From Duty Report) By Department of the Army Medical Treatment Facilities; Sec IV - Physical Examinations of Second Lieutenants, Regular Army - Required of Permanent Promotions Made in 1949

ATT-8-19, Training Test for General Hospitals, Communications Zone (T/O&E's 8-551, 8-552 and 8-553)

TB PMG-3, 3 Dec 51: Blood and Body Fluids

GO 104, 5 Dec 51: Meritorious Unit Commendation - Para 11 - The 629th Medical Clearing Company (Separate)

T/O&E 8-553, 29 Oct 51: General Hospital, 2,000-Bed, Communications Zone

GHQ FEC Cir 5, 14 Jan 52: Central Hospital Funds and Hospital Funds

GHQ FEC Cir 6, 23 Jan 52: Medical Attendance

SR 350-230-60, 8 Jan 52: Education and Training - Tentative Courses at Civilian Educational Institutions for Officers of the Army Medical Service

SR 615-360-1, C-5, 8 Jan 52: Enlisted Personnel - Discharge Procedures and Preparation of Separation Forms

SR 600-145-40, 14 Jan 52: Personnel - Change of Station and Rotation of Duty Assignment of Certain Veterinary Procurement Inspectors

DA Cir 102, 17 Dec 51: Sec II - Narcotics Control at Medical Treatment Facilities

DA Cir 104, 19 Dec 51: Special Subject for Inspection - Misassignment of Physically Handicapped Rotation Combat Personnel

DA Cir 106, 28 Dec 51: Sec II - Nontaxable Compensation Shown on Forms W-2

DA Cir 3, 3 Jan 52: Sec II - Income Exempt from Withholding Tax

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CLARIFICATION OF ACCOUNTING CLASSIFICATIONS

Section II of Department of the Army Circular No. 96, dated 23 November 1951, is reprinted for the information of all concerned:

1. Information available to The Surgeon General indicates that some misunderstanding exists at Department of the Army medical treatment facilities with respect to the correct appropriation and account code symbols to cite on vouchers when depositing or crediting collections for medical treatment and also for sales of medical supplies and equipment.

2. This misunderstanding is due apparently to the fact that the rates of charge for medical treatment of pay patients (see DA Cir. 67, 1951) includes component amounts creditable to standard medical supplies, nonstandard medical supplies, and/or personal services, dependent upon the kind of medical treatment furnished and the applicable rate. Such component amounts reflect the proportionate share of the over-all rate for medical treatment that is to be deposited (or credited) to reimburse the appropriation for the cost of furnishing such supplies and services, and are based upon approved cost elements and factors of cost experience. Since such collections are not the result of direct issue or sale of supplies and equipment, as such, they are not proper for deposit to a replacing account, but should be applied to the appropriation initially charged with the cost of furnishing such medical service and/or supplies, i.e., for the fiscal year 1952: 2122020 Maintenance and Operations, Army 1952. See breakdown of account codes and amounts stated in DA Circular 67, 1951.

3. For the fiscal year 1952, collections for transfer or sale of medical supplies and equipment as such, as differentiated from collections for medical charges described above, will be deposited or credited to 212/34820 Replacing Medical Supplies, 1952 and 1953, as outlined in SR 35-210-31.

TRAINING FILMS

Training films (16mm) recommended by the Consultants Division, Medical Section, General Headquarters, Far East Command, will be periodically listed in The Surgeon's Circular Letter. These films are available in the Far East Command and may be procured through the nearest film equipment and exchange office (Signal Corps).

Release Number	Recommended by the Neuropsychiatric Consultant	Running Time
PMF-5011	Psychiatry For the General Medical Officer	44 min.
PMF-5012	Combat Exhaustion (Neuropsychiatry)	44 min.
PMF-5019	Let There Be Light (Neuropsychiatry)	60 min.
PMF-5047	Shades of Gray (Psychoneurosis in the Army - Causes and Treatment)	67 min.
PMF-5116C	Journey to Reality	40 min.
PMF-5141	Feeling of Rejection	22 min.
PMF-5142	Feeling of Hostility	30 min.

BLOOD BANK RESEARCH
406th Blood Bank, APO 500

Two medical officers, designated as a Blood Research Team, have been assigned from the Central Blood Bank Depot to determine factors pertinent to whole blood utilization and problems of supply, both in the Japan Logistical Command and in Korea. They have made surveys of the majority of medical installations using whole blood in the Japan Logistical Command and in Korea. They have tried to determine approximate amounts of blood used in different areas under varying conditions, the number and types of reactions seen during administration of the blood, any delayed reactions or complications associated with blood transfusions, any problems of supply, and also to evaluate the overall efficiency and distribution aspects of the whole blood program.

Any survey of the above factors is of necessity limited to a given period of time. The maintenance of an adequate supply of whole blood with a minimum amount of loss and a paucity of reactions and supply problems is of major importance. It depends, to some extent, upon the using installation reporting any reactions, complications of transfusions, etc. to the Central Blood Bank in Tokyo. Any such data, either of individual cases or of a series of cases, or any constructive comments on the blood program should be directed to the Commanding Officer, 406th Medical General Laboratory, APO 500.

During the period 1 January 1951 through 31 November 1951, a total of 113,056 pints of blood were supplied to medical installations in Korea and 28,213 pints were distributed in the Japan Logistical Command. To date, the using installations have reported an adequate supply at all times, relatively small numbers of reactions, and have expressed a uniform approval of the whole blood program.

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OF SURGERY IN THE ORIENT

Colonel Frank E. Hagman, MC, Consultant in Surgery, GHQ, FEC

THE aggressive armed forces of the North Korean communists smashed across the 38th Parallel in June 1950, without provocation, without warning and without opposition. These forces were well equipped, well led, and well trained. They swept aside everything before them and it seemed certain the peninsula would be rapidly engulfed.

The response of the United Nations forces to this aggresion is common knowledge. Anxious days passed, but the Pusan Perimeter held. Then the tide turned as the brilliantly planned and superbly executed Inchon landing stunned the North Korean forces. The campaign appeared to be nearing a successful conclusion for the United Nations forces as the Yalu River was reached. Then came the Chinese hordes from the North. The sickening and disheartening struggle was renewed against a ruthless enemy.

The support given by the medical services to the armed forces of the United Nations can never be depicted completely. To paraphrase Churchill - "Never have so few done so much for so many." It is our purpose to review briefly some of the surgical achievements and problems during eight months of bitter fighting on the peninsula.

The Korean campaign began with a total of 197 medical officers assigned to the Far East Command, the lowest number since the beginning of the occupation. Of the 197, 50 were residents from hospitals in the United States, removed from the Army residency training program for temporary duty to meet the medical needs of the occupation. Other branches of the medical services were scarcely any better situated. Nevertheless, from the limited personnel available, one evacuation hospital and three mobile army surgical hospitals were organized, equipped and committed to the medical support of the armed forces in Korea. The pressing emergency permitted no opportunity to indoctrinate the medical officers to the problems encountered in war surgery.

Meanwhile medical installations in Japan continued to execute their mission although severely handicapped by critical depletion of medical service personnel. This deficiency was gradually relieved by the arrival of more medical officers and other medical personnel assigned to the Far East on temporary duty and others dispatched for permanent duty. Later, various new hospitals and medical units were organized and committed in Japan and Korea, thus strengthening the medical support to the armed forces.

Even as fighting continued and progressed there was a large turnover of medical officers. Among US military medical officers alone, many hundreds have been sent to the command and large numbers have returned to the United States. Some returned to resume residencey training, others as rotatees and still others for compassionate reasons, illness or injury. A very large turnover involved temporarily assigned medical officers of the United States Navy. These were loaned to the Army for periods of four to six months, following which they reverted to Navy control.

In contrast to World War II, very few physicians and surgeons have donned the uniform to contribute their talents to the direct support of the United Nations efforts. Nevertheless, much credit for the excellent results obtained, must go to those who formulated the fundamental concepts and principles upon which the management of battle casualties is based. To a great degree, it is the young medical officer who has carried the burden of responsibility for the care of the sick and the wounded. He has demonstrated magnificently, that he can readily adapt his training and experience to the peculiar requirement for managing battle casualties in a theater of operations. In the early stages of the confliot, surgical errors occurred because of the lack of experience in military surgery. As rapidly as possible, the priceless lessons learned from the wars of the past were disseminated to all responsible for the management of casualties. These fundamental concepts and principles have made it unnecessary for each Doctor to learn from his own experience what constitutes safe and effective surgical practice in the military sphere. Technical Bulletins, Directives, Circular Letters, discussions and suggestions have increased the frame of reference on which surgical judgment has been based. Withal, it has been clear that the judgment of the surgeon on the ground must prevail. It is impossible and unwise to spell out for him each detail in the management of the patient.

Equipment and facilities have been adequate, although simple and standardized. With these, the surgeon has altered his technique and improvised as necessary in accordance with the circumstances of what needs to be done.

The pressing demands of the Korean campaign, as in World War II, influenced the care of the wounded. Accordion-like moves of medical units up and down the peninsula occurred as the fortunes of war favored or militated against our forces. Danger of being cut off by enemy action, few and poor roads, and the limited number of hospitals available early in the campaign were factors in keeping mobile surgical hospitals farther to the rear than would have been ideal. These factors, together with unavoidable delays in the recovery of wounded in combat from remote and difficult terrain under fire, increased the time lag between wounding and initial surgery. It also was not unusual for patients to be moved to the rear, after operation, much earlier than one would wish under more stable and ideal circumstances. Beds had to be available for freshly wounded patients and hospitals were forced to move forward or rearward as the tactical situation demanded.

The management of the patient, as in World War II, has been in phases and by many surgeons and hospitals along the chain of evacuation. Surgical procedures have been placed in time and space relationships altered by the tactical situation, the welfare of the patient and the relationship between the surgeon in one hospital with the surgeons in other hospitals, to the end that the military effort was not impeded or harm done to the patient by doing an operation at the wrong time or in the wrong place.

As Dr Edward D. Churchill has pointed out, war surgery is the management of trauma in epidemic proportions in young, vigorous men, with diagnosis relatively simple and treatment immediate and direct. Complex diagnostic procedures are usually not necessary. By organization, teamwork and phased treatment, surgical management of trauma in the Korean campaign has been accomplished within the bounds of accepted surgical standards and without undue confusion and concessions to the need of haste.

WOUND DEBRIDEMENT

Because of the large number of casualties, wound debridement has been a major problem. Antibiotics have been used freely and have been extremely valuable adjuncts to surgery. It has been amply demonstrated again, however, they are not substitutes for competent debridement.

Debridement of wounds without primary closure remains based on sound surgical principles. It cannot be predicted with certainty which wounds, if sutured, will become dangerously infected. Recognition and removal of all necrotic and devitalized tissue during debridement cannot be done with absolute certainty unless normal tissue is sacrificed unnecessarily. Furthermore, it is frequently necessary to transport patients with debrided wounds early, thus interrupting the professional supervision of the wound.

At various times during the conflict, many wounds were not debrided for one reason or another, particularly in many instances during periods when there were large numbers of casualties. Many of these were perforating soft tissue wounds which did not develop untoward complications. At the same time, however, a serious infection, including clostridial myositis, developed in some.

Early in the conflict, attempts were made by inexperienced personnel to close wounds primarily with considerable reliance placed on antibiotic therapy. Delayed healing and risk of loss of life and limb are too high a price to pay for neglect of adequate wound surgery. It is axiomatic that wounds should be debrided when the danger from the infection is greater than the risk of injuring important structures and wounds should be left open without primary suture except in certain specific instances.

Experience in the Korean campaign has demonstrated again that battle wounds should be debrided by employing bold incisions through skin and fascia, to furnish free exposure of the tissues traversed by the missile. All devitalized tissue and foreign material which can be recognized, must be removed to prevent and eradicate infection. At the same time, skin need not be sacrificed when viable and vital structures must be safeguarded during the procedure. Good lighting, adequate X-ray, satisfactory positioning of the part, anaesthesia as required by the exigencies of the wound and the all-important and often neglected extra pair of hands for assisting the operator, are minimal essentials for satisfactory wound surgery.

Debridement of large wounds is frequently necessary as an integral part of the measures used in resuscitating the patient. Shock accompanying large wounds at times cannot be completely controlled without surgical care of the tissue contaminated by bacteria.

WOUND SHOCK

Wound shock has occurred frequently in the Korean campaign. Whole blood has been available in ample quantities at all times and has been used as the fluid of choice for the restoration of blood volume. Plasma and serum albumin have been available for use in forward areas for emergency administration in the treatment of wound shock. Experience with other blood substitutes has been limited to one hospital far to the rear and no conclusions as to their efficacy can be drawn.

Usually, wound shock was not a difficult problem to manage with the means at hand. Many times, however, patients in wound shock could not be resuscitated with satisfaction and were said to be in "irreversible shock." The fundamental difficulty for failure to resuscitate these patients usually was not determined because necropsies were not done routinely.

Wound shock which does not respond to the usual measures of resuscitation may be associated with complications, the recognition and treatment of which may alter seeming "irreversibility" favorably. In addition to reduction in blood volume due to the loss of whole blood, plasma, and water, and other effects of bacterial contamination, cardio-respiratory embarrassment may be present in sufficient degree to contribute to the continuation of the state of wound shock. The recognition and treatment of tension pneumothorax, massive hemothorax and atelectasis, cardiac tamponade, paradoxical respiration associated with flail chest and laryngeal obstruction are extremely important and may alter the course of events. In addition, the recognition and treatment of concealed hemorrhage intra-abdominally and extraperitoneally, or into the soft tissue of the thigh or buttocks may alter what appears to be "irreversible" wound shock.

Shock which fails to respond to therapy commonly is associated with thoraco-abdominal, retroperitoneal, and large extremity and buttocks wounds. The exact role of infection and toxic factors in these cases is not completely understood. Suffice it to say that seeming "irreversibility" in wound shock appears to be related to bacterial contamination in a significant number of battle casualties. Antibiotic therapy and surgical care of contaminated tissue therefore must be considered as part of the plan for resuscitation. Antibiotic therapy should be instituted as soon as possible. Since patients in wound shock will not absorb substances injected subcutaneously or intramuscularly satisfactorily, antibiotic therapy should be administered intravenously whenever it is feasible so to do. Until it has been demonstrated that other antibiotics are more valuable, intravenous administration of one or more million units of crystalline penicillin and 0.5 grams of streptomycin in isotonic fluid should be given to these patients. Massive doses of antibiotics should be given intravenously subsequently as the circumstances dictate.

A simple and reliable means of determining blood volume in forward hospitals would be of great value to the medical officer. Unfortunately, thus far, such has not been developed. Lacking a direct method, the surgeon has been called upon to estimate the loss of blood volume clinically.

Clinical evidence indicates that reduction in blood volume of 20% or less requires either no specific treatment or perhaps no more than replacement by plasma, serum albumin, plasma substitute or electrolytes and water. Reduction of blood volumes between 20-35% can be compensated for, temporarily at least, by blood plasma or other blood substitutes. Usually, however, whole blood must be administered after the emergency is over. With reduction of blood volume above 35%, whole blood is essential for resuscitation.

Profound wound shock in previously healthy, young, adults, may be considered for practical purposes to be the result of the loss of 3,000 to 3500 cc of blood volume aggravated by the wound itself, by unsplinted fractures, by pain from perforated viscus by various complications discussed above, by dehy-

*EARLY POST-INJURY THORACOTOMIES PERFORMED IN KOREA (JUN-NOV 51)

(Tokyo Army Hospital, 11 Jan 52)

CASE NO.	WIA	HOSPITAL	OPERATION	FINDINGS	SURGERY DONE	ADMISSION TO TAH	FINDINGS ON ADMISSION	TREATMENT	CONDITION	DISPOSITION
1	25 May	2nd MASH	Intercostal tube	Hemothorax	Drainage	30 May	Org. Hemothorax	Thoracenteses Decortication 26 Jun	Clear	Duty 14 Sep
2	5 Jun	8076 MASH	Intercostal tube	Sucking Wd.	Drainage	10 Jun	Org. Hemothorax	Thoracenteses Decortication 3 Jul	Clearing Slowly	6 Oct ZI
3	6 Jun	8063 MASH	Intercostal tube	Hemothorax	Drainage	15 Jun	Hemopneumo-thorax	Thoracenteses Decortication 12 Jul	Clearing Slowly	20 Aug ZI
4	11 Jun	8055 MASH	Intercostal tube	Hemothorax	Drainage	6 Sep	Empyema	Thoracenteses Decortication	Clearing Slowly	ZI for nerve injury
5	13 Jun	121st Evac	Intercostal tube	Hemothorax	Drainage	13 Jun	Empyema	Thoracenteses Decortication 10 Jul	Clearing Slowly	6 Oct ZI
6	2 Jun	8055 MASH	Intercostal tube	Hemothorax	Drainage	18 Jun	Org. Hemothorax	Thoracenteses Decortication 24 Jul	Clearing Slowly	29 Sep ZI
7	18 Jun	8063 MASH	Intercostal tube	Hemothorax	Drainage	24 Jun	Org. Hemothorax	Thoracenteses Decortication 17 Jul	Clearing Slowly	12 Sep Duty
8	30 Jun	8055 MASH	Intercostal tube	Hemothorax	Drainage		Org. Hemothorax	Thoracenteses	Clear	13 Aug ZI(nerve injury)
9	9 Jul	8055 MASH	Intercostal tube	Hemothorax	Drainage	19 Jul	Hemothorax	Thoracenteses	Clear	11 Aug ZI (MFB knees)
10	AI 16 Jul	8076 MASH	Intercostal tube	Pneumo-thorax	Drainage	20 Jul	Lung Abscess	RU Lobectomy (Segmental) 21 Aug	Clear	Duty
11	SI 17 Jul	8076 MASH	Thoracotomy	Laceration RUL & in-ternal mam-mary artery	Repair	2 Aug	Hemopneumo-thorax	Thoracenteses	Clear	361st (psycho) 17 Sep
12	17 Jul	8076 MASH	Intercostal tube –	Tension pneumo-thorax		17 Jul	MFB in lung (LLL)	Thoracotomy removal 26 Jul	Clear	5 Sep Duty
13	AI 25 Jul	161st SH	Thoracotomy	Perforation Diaphragm	Repair	7 Aug	Hydropenumo-thorax	Thoracenteses	Clear	6 Sep Duty
14	28 Jul	8225 MASH	Intercostal tube	Pneumo-thorax	Drainage	3 Aug	Pneumothorax EKG: Pericarditis	Conservative	Clear	7 Sep Duty
15	3 Aug	8225 MASH	Thoraco-abdominal exploration	Laceration of Diaphragm	Repair	3 Aug	Pneumonitis	Conservative	Clear	30 Aug Duty
16	6 Aug	8076 MASH	Thoraco-abdominal exploration (2)	Laceration LLL, dia-phragm & spleen	Repair	31 Aug	Residual hemo-thorax MFB in heart	Conservative	Clear chest EKG: pericard-itis	8 Nov ZI
17	14 Aug	8225 MASH Osaka AH	Intercostal tube Open thora-cotomy	Pneumo-thorax Empyema	Drainage Drainage	13 Oct	Empyema (open thor.)	In transit to	.....	ZI 17 Oct
18	15 Aug	8055 MASH	Intercostal tube	Hemothorax	Drainage	20 Aug	Residual hemo-thorax	Thoracenteses	Clear	21 Sep Duty
19	24 Aug	USS Repose	Intercostal tube Thoracotomy	Tension pneumo-thorax	Repair	9 Oct	Residual organ-ized hemothorax	Conservative	Clearing	19 Nov Duty
20	1 Sep	121st Evac	Thoraco-abdominal exploration	MFB RLL & liver lac-erated	Repair MFB liver & lung removed	5 Sep	Residual hemo-thorax	Conservative	Clear	25 Sep Duty
21	1 Sep	121st Evac	Small thora-cotomy	Hemothorax	Drainage	12 Sep	Hemothorax	Thoracenteses	Clearing	17 Oct Duty
22	6 Sep	8055 MASH	Thoracotomy	Laceration of lung & pericardium	Repair	25 Sep	Pneumohemo-thorax Pericarditis (EKG)	Thoracenteses	Slow to Clear	17 Oct ZI
23	9 Sep	8055 MASH	Small Thoracotomy	Laceration of diaphragm and liver	Repair	14 Sep	Hemothorax	Thoracenteses	Clear	20 Oct Duty
24	9 Sep	8063 MASH	Thoracotomy	Laceration LLL	Repair	15 Sep	Residual Hemothorax	Conservative	Clear	13 Oct Duty
25	12 Sep	8076 MASH	Thoracotomy	Laceration RUL; multi-ple rib fragments	Repair Removed	25 Sep	Residual Hemothorax Chest Deformed	Conservative	Deformed chest wall	17 Nov ZI (Ethi-opia)
26	12 Sep	8225 MASH	Intercostal tube	Hemothorax	Drainage	17 Sep	Hemopneumo-thorax Rheumatic heart disease	Thoracenteses	Clear	12 Oct ZI for RHD
27	15 Sep	8209 MASH	Intercostal tube	Inexpend-able lung	Drainage	6 Oct	Pneumohydro-thorax Pericarditis	Thoracenteses Decortication 31 Oct	Chest Clear EKG still	Still in TAH positive
28	17 Sep	121st Evac	Intercostal tube Closing of sucking wound	Tension Pneumo-thorax	Drainage	22 Sep	Pneumohydro-thorax. Mul-tiple leg wounds	Thoracenteses Sec. Closure	Clear Chest	Trf for P.T. Sendai 16 Oct
29	21 Sep	8076 MASH	Thoracotomy	Laceration diaphragm and spleen	Repair Splenec-tomy	9 Oct	Residual hemo-thorax	Thoracenteses	Clear	28 Oct Duty

CASE NO.	WIA	HOSPITAL	OPERATION	FINDINGS	SURGERY DONE	ADMISSION TO TAH	FINDINGS ON ADMISSION	TREATMENT	CONDITION	DISPOSITION
30	4 Oct	121st Evac	Thoraco-abdominal exploration	Laceration RLL and diaphragm	Repair	9 Oct	Pneumohydrothorax	Thoracenteses	Borderline for Decortication	19 Nov ZI (for nerve injury)
31	4 Oct	8063 MASH	Thoracotomy	Laceration diaphragm and liver	Repair	8 Oct	Hemothorax	Thoracenteses	Clear	5 Nov Duty
32	5 Oct	Norwegian MASH 121st Evac	Thoracotomy Laparotomy	Laceration LUL and Spleen	Splenectomy	13 Oct	Empyema	Thoracenteses Decortication 25 Oct	Clear with MFB retained	10 Dec ZI
33	6 Oct	8063 MASH	Thoracotomy	Laceration LLL & pericardium	Repair	12 Oct	Residual empyema pericarditis	Conservative	Clear	27 Nov Limited Duty
34	7 Oct	Norwegian MASH	Thoracotomy	Laceration lung; Hemothorax	Repair	13 Oct	Hydropneumothorax	Thoracenteses	Clearing	7 Dec ZI(for nerve injury)
35	7 Oct	Norwegian MASH	Thoracotomy	Laceration LLL	Repair	16 Oct	Hydropneumothorax	Thoracenteses	Clearing	Still in T.A.H.
36	7 Oct	Norwegian MASH	Thoracotomy	Laceration right lung and liver	Repair	23 Oct	Hydropneumothorax Empyema	Thoracenteses Decortication 13 Nov	Clearing	Still in T.A.H.
37	7 Oct	Norwegian MASH	Thoracotomy	Laceration RLL	Repair	12 Nov	Hydropneumothorax (Org. Hemothorax)	Conservative	Residual Hemothorax	28 Nov ZI(for nerve injury)
38	17 Oct	Norwegian MASH	Thoracotomy	Unknown	Unknown	3 Nov	Org. Hemothorax	Thoracenteses	Future decortication	Still in T.A.H.
39	8 Oct	8209 MASH	Thoraco-abdominal exploration	Laceration RML, diaphragm and liver	Repair	19 Oct	Hydrothorax	Thoracenteses	Residual hemothorax	8 Nov ZI
40	8 Oct	121st Evac	Thoracotomy	Perforation diaphragm and spleen	Repair Splenectomy	13 Oct	Residual hemothorax (organized)	Conservative	Clearing	8 Nov Duty
41	9 Oct	8076 MASH	Thoracotomy	Laceration RUL	Repair	17 Oct	Organized Hemothorax	Thoracenteses	Future decortication	ZI
42	9 Oct	8076 MASH	Upper Thoracotomy	Laceration RUL & RLL	Repair	16 Oct	Organized Hemothorax	Conservative	Clear	23 Nov Duty
43	10 Oct	121st Evac	Small Thoracotomy	Laceration diaphragm & FCC, 10th rib	Repair	16 Oct	Hemothorax	Thoracenteses	Clearing	19 Nov Duty
44	10 Oct	Norwegian MASH	Thoracotomy	Laceration diaphragm and liver	Repair	16 Oct	Pneumohydrothorax, rt; Hemothorax, lt	Thoracenteses	Clear	8 Nov Duty
45	12 Oct	121st Evac	Thoraco-abdominal exploration	Laceration diaphragm and bowel	Repair MFB Removed	17 Oct	Bilateral hydrothorax	Thoracenteses	Clear	24 Nov Duty
46	13 Oct	Norwegian MASH	Thoracotomy	Laceration RUL & RLL	Repair	19 Oct	Pneumohydrothorax; Empyema	Thoracenteses Decortication 15 Nov	Clearing	Still in T.A.H.
47	13 Oct	Norwegian MASH	Thoracotomy	Laceration RLL & diaphragm and liver	Repair	19 Oct	Pneumohydrothorax	Thoracenteses	Clearing	10 Jan ZI for combined wounds
48	14 Oct	8076 MASH	Thoracotomy	Laceration RUL	Repair	7 Nov	Organized hemothorax	Thoracenteses	Slow to Clear	12 Dec ZI
49	17 Oct	Norwegian MASH	Thoracotomy	Laceration rt lung	Repair	23 Oct	Pneumohydrothorax	Thoracenteses	Slow to Clear	8 Dec ZI
50	17 Oct	Norwegian MASH	Thoracotomy	Laceration rt lung	Repair	21 Oct	Pneumohydrothorax	Thoracenteses	Candidate for decortication	10 Dec ZI
51	17 Oct	8063 MASH	Thoracotomy	Retained MFB Hemothorax	Removal draining	27 Oct	Residual hemothorax	Conservative treatment	Clearing	Duty
52	17 Oct	8076 MASH	Thoraco-abdominal exploration	Laceration rt lung, diaphragm, liver left kidney	Repair nephrectomy	19 Oct	Residual hemothorax	Conservative treatment	Clearing	8 Nov ZI for combined wounds
53	19 Oct	8076 MASH	Thoracotomy	Laceration LUL, pneumohydrothorax	Repair	30 Oct	Hemothorax	Thoracenteses	Candidate for decortication	19 Dec ZI
54	19 Oct	8225 MASH	Intercostal tube	Neck wound pneumothorax	Drainage	23 Oct	MFB subscapular region residual hemothorax	Removal of MFB Conservative treatment	Clear	10 Jan ZI for neck wound
55	23 Oct	Norwegian MASH	Thoracotomy	Laceration RLL, retained MFB	Repair	17 Oct	Empyema	Thoracenteses Open Thoracotomy, 27 Nov	Improved Further Trmt rqd	8 Dec ZI
56	24 Oct	8063 MASH	Thoracotomy	Laceration RLL, diaphragm liver	Repair	28 Oct	Empyema	Thoracenteses Decortication 27 Nov	Clearing Well	Still at T.A.H.
57	22 Nov	8055 MASH	Thoracotomy (small)	Laceration lung, diaphragm	Repair	3 Dec	Empyema	Thoracentses Decortication 4 Dec	Clearing Well	Still at T.A.H.
58	10 Oct	Norwegian MASH	Thoracotomy	Laceration lung	Repair	30 Nov	Residual organized hemothorax	Conservative	Clearing	Still at T.A.H.

*Early - within 24 hours.

dration, by apprehension, by cold and fatigue and by morphine. Usually greater blood volume is lost from severe wounds of the extremities than from abdominal and chest wounds.

As Beecher and others have pointed out, it is not necessary to delay surgery until complete resuscitation has been attained. The aim is to obtain a systolic blood pressure of 80-85 mm of mercury which is rising, pulse rate that is dropping, color and temperature that are improving and thirst which is slackening. Surgical care of wounds should then be instituted as part of the continuing plan of resuscitation.

Intra-arterial transfusions have been utilized in patients who have not responded to other methods of resuscitation. Clinical impressions have not been uniform and its efficacy so far has not been critically evaluated. Some medical officers have been enthusiastic in their praise of the method, others have not been impressed that the method has offered more than ephemeral improvements and benefits.

LOWER NEPHRON NEPHROSIS

Lower nephron nephrosis has frequently been encountered during the Korean campaign. Most disheartening to the staff of a forward hospital is oliguria or anuria developing in wounded patients after everything considered possible has been done for him. Success has been attained in the resuscitation of the patient and anaesthesia has been administered with skill and complete satisfaction to the anaesthesiologist and surgeon. Formidable operative procedure has been carried out to a successful conclusion. The tired staff has been stimulated by a glorious sense of achievement but, alas, post-operatively the patient appears to be doing well except for oliguria or anuria. The water tolerance test to eliminate the possibility of dehydration as the cause of unsatisfactory excretion of urine improves the out-put none at all. Then all realize that medical knowledge contributes little except to sustain the patient as best possible but above all, not to drown him by pouring fluids into him in the vain hope that the kidneys will be stimulated by more water. The staff then hopes that restriction of fluid intake will prevent pulmonary edema and that the lower nephron will undergo spontaneous healing before the products of catabolism kill the patient. Unfortunately, the wounds are often severe and complicated and the patient succumbs from insults to his body economy long before nature heals the lower nephron.

A common factor in the etiology of lower nephron nephrosis appears to be a period of anoxia associated with toxic substances. The roles of multiple transfusions, severe infection, vaso-constriction and the like, are not clearly understood. Surely what we call lower nephron nephrosis deserves investigation by all the means available to the end that more facts will be uncovered which will aid the medical profession in overcoming this serious malady.

ANTIBIOTIC THERAPY

Development in the field of antibiotic therapy has been rapid and promising. New drugs have become available and have found a place in the treatment of wound infections. It became apparent to The Surgeon General that an intelligent discussion of the subject was necessary to give the medical officer a frame of reference from which to choose the antibiotic most likely to be successful. To this end Technical Bulletin Medical No. 9 was published by the Department of the Army on 22 June 1951 and widely distributed in the Far East Command. In the preparation of the Bulletin many authorities have been consulted and it therefore can be considered a reliable guide to present day antibiotic therapy. It seems worth while to emphasize a few of the thoughts contained therein.

The Bulletin establishes for medical personnel the principles governing the use of antibiotics. It should be correlated with its companion TB MED 172 concerning the use of sulfonamide compounds. The exact mechanism of antibacterial action of antibiotics, is unknown. It is established that the activity of the drugs varies directly with the concentration and that they must reach the infection to be of value. Antibiotic drugs are bacteriostatic and/or bacteriocidal. Aureomycin, chloramphenicol and terramycin are bacteriostatic only, while penicillin and streptomycin are bacteriostatic in low and bacteriocidal in high concentration. Specific theraphy can be instituted only when exact clinico-bacteriologic diagnosis can be established. Since this is not always practicable, especially in the combat zone, the clinical diagnosis should be as rapid and exact as possible. A valuable clinical aid is the direct smear and should not be overlooked. The aid of a bacteriologist should be obtained when possible in severe infection, in staphloccal infection, in non-hemolytic infection, in acute gram negative bacillary infection; when there is poor response to treatment and when there is an infection of questionable etiology.

Combined therapy with another antibiotic or with a sulfonamide is of benefit when drug resistant bacteria are encountered. Penicillin and chloramphenicol, however, should not be combined because the effects are antagonistic. Although treatment of peritonitis is dependent upon both early diagnosis and early corrective measures, the use of penicillin, one million units combined with streptomycin 0.5 gm intravenously, twice daily, are usually the most effective auxillary and will be considered the drugs of choice until such time as further work establishes more effective substitutes.

Cultural sensitivity determinations at regular intervals should be made in subacute and chronic infections and may indicate the necessity for changing the antibiotics employed. It is again emphasized that antibiotics are extremely valuable adjuncts to surgery but their use does not lessen or minimize the importance of basic surgical principles.

CLOSTRIDIAL MYOSITIS

At this point it seems advisable to remind ourselves of the ever present danger of clostridial myositis. As in other wars, many cases have been encountered during the Korean campaign. Of these, a large number have been associated with arterial injuries but others have followed single or multiple missile wounds without apparent injury to the blood supply of the part. Clostridial myositis must be recognized and treated in the first few days after wounding. The fate of an extremity and indeed the life of the patient are dependent upon prompt recognition and treatment. The best treatment, of course, is prevention by early restoration of the general circulation, avoidance of constricting dressings and tight casts, adequate wound debridement and measures such as fasciotomy for tension within the muscle fascial envelope.

Because of the ever present danger of clostridial

myositis developing in patients with vascular injuries, these patients must be held in forward hospitals where initial surgery is performed. Everything must be done here to improve the circulation and evacuation must be deferred until the extremity is no longer threatened. If clostridial myositis supervenes, it must be promptly recognized and treated by surgical extirpation of the involved muscle, muscle groups or extremity. To place the patient with a threatened extremity in the chain of evacuation, except for pressing tactical reasons, invites a tragic outcome.

VASCULAR INJURIES

Closely related to this subject is the management of vascular injuries. Unfortunately, arterial injuries commonly are associated with severe soft tissue and skeletal wounds. Attempts at repairing damaged arteries in such cases have usually been fruitless and unwise, because of the great risk of infection and secondary hemorrhage. Furthermore, when the number of casualties requiring surgical care is large, it is questionable whether the time expended in attempting to restore the continuity of the vessel is justified. We must choose between a time consuming procedure of dubious value for one patient and attempting to do the greatest good for the greatest number who are awaiting surgical care in the preoperative tent. Nevertheless there are cases and there are circumstances which justify every effort to restore the continuity of a major artery by operation. This has been done with commendable frequency during the present campaign. Indeed failure has occurred in many instances, especially in attempts to repair the popliteal artery. Success, however, has been rewarding in a sufficient number of cases to encourage efforts in this direction. Let not the too precipitous evacuation of such a patient vitiate these noble attempts.

EVACUATION OF PATIENTS

Evacuation of certain types of patients too soon after the operation is harmful and dangerous. Deterioration of the general condition of patients with abdominal and thoraco-abdominal injuries has occurred more often than is commonly realized. While the patient may appear to be doing well three or four days after operation, he has an entirely different appearance upon arrival at his destination.

The trip from hospital to air field is often rough and time consuming. Delay at the air field before loading and after boarding the plane frequently occurs before take off. While the engines are being warmed and the plane taxies about the field, the cabin may become excessively hot, particularly in summer months. Patients perspire profusely, thereby losing much fluid. In flight some patients develop abdominal cramps and distention. Some become air sick when the flight is made through rough weather.

After the flight, there is more loss of time and a long trip by ambulance must be endured before the patient arrives in the hospital. He may now require treatment by nastro-gastric suction, intravenous fluids, operation for dehiscense of the abdominal wound and other complications. It is strongly urged that patients with abdominal injuries following operation be held in the hospital performing the initial operation for seven to ten days and even longer should the clinical condition be unsatisfactory.

Unwise early evacuation of patients with vascular injuries and threatened extremities was discussed above. To reiterate, these patients must be treated at the hospital performing the initial operation and not evacuated until improvement of circulation is satisfactory; danger of clostridial myositis has passed; or operative procedures, including amputation if necessary, have been performed.

Likewise, too rapid movement of maxillo-facial, cranio-cerebral and spinal cord injuries after operation may eventuate in complications and perhaps death. A period of observation is mandatory until stabilization has been obtained permitting reasonably safe travel. When possible tracheotomized patients should be held until they no longer are entirely dependent upon the tube as an air way.

The decision to transport surgical patients must not be undertaken lightly. Good judgment is of the essence. It is the responsibility of mature medical officers with experience to decide the time for safe transportation and it should never be undertaken in a cursory manner.

THE RECORD

There is need for a more uniform clinical record. Observations of the clinical course of patients commonly are written on odd bits of paper which must be sorted out to obtain indispensable information for the rational management of the case. These bits of paper flutter about as they are removed from the envelope and are easily lost.

When many casualties inundate an organization, it may be impossible to record observations in detail because of time, fatigue, and other limiting conditions. Essential information, however, in serious cases and those likely to develop complications is of paramount importance to medical officers who subsequently become responsible for their future intelligent management. In fairness to patients and professional colleagues, let the record show time, dates, and therapy; let the record show what occurred at the operation; let the record shed a little light and drop a few clues to alleviate the trials and tribulations of the doctors to whom the patients are sent.

ALERTNESS TO COMPLICATIONS

Complications are inevitable in surgical patients. Because of the nature of battle casualties, complications are often encountered. A high degree of awareness to the development of complications in battle casualties must be engendered in medical officers responsible for their care. Complications must be sought for aggressively and treated early to give the patient the best chance for survival.

Technical Bulletin MED-147 on the management of battle casualties has been invaluable as a guide for all medical officers during the conflict. It is pertinent to emphasize certain important details and certain unwise deviations from the concepts set forth in the bulletin.

MEDICAL MANAGEMENT IN DIVISIONAL AREAS

Hemorrhage: The care of the wounded in the divisional area has been largely devoted to first aid measures. Exsanguination does not occur in all in-

juries of major vessels of the extremities. Vasospasm produced by trauma may prevent lethal loss of blood volume and indeed severe ischemia followed by gangrene is possible. Control of bleeding by pressure dressings or clamping and ligating blood vessels is preferred to the application of a tourniquet.

The tourniquet is a ligature applied externally which may be dangerous if applied unwisely and neglected, or life saving if applied intelligently with proper indications and handled with care. It is important to distinguish between venous and arterial bleeding. Placing a tourniquet proximal to the source of venous bleeding increases hemorrhage unless sufficient pressure is applied to prevent ingress of blood to the extremity from arteries. A tourniquet should be applied only after bleeding is determined to be from arteries which cannot be controlled otherwise. It should be applied at conventional levels known to offer the greatest likelihood of positive control of hemorrhage. When part of the extremity is hopelessly damaged and obviously requires amputation, a tourniquet should be applied to the lowest level possible and left in place until the patient has been prepared for operation.

Injudicious use of the tourniquet has resulted in the loss of extremities. The patient who has a tourniquet applied should be marked plainly by a large "T" on his forehead or by other means so that attention will be directed immediately to the fact that a tourniquet is in place. If it is at all possible, a technician should accompany the patient during the evacuation.

Splinting of Fractures: It is regrettable, but true, that patients with fractures of the extremities have been evacuated to surgical hospitals without splints. This violates one of the fundamental principles of first aid. Neglect of splinting fractures increases wound shock and danger of arterial and other injuries during transportation.

When a Thomas splint and traction are used for fractures of lower extremities, the shoe should not be removed because traction applied to the bare foot has produced pressure necrosis.

Circular Dressings: Circular dressings for wounds of the extremity must be observed carefully during the transportation of the patient. What appears to be a satisfactory dressing at the beginning of the journey may become too tight as the result of edema or bleeding into the tissues. Complete occlusion of the blood supply may develop and the extremity may be irrevocably damaged.

Morphine: Morphine overdosage has been noted from time to time. It must be realized that many wounded patients require no drugs for the control of pain. Of those that do, usually a small dose is sufficient. The morphine syrette contains 1/2 grain of the drug and to give more than half of this amount is usually unwise. Morphine must be given judiciously in thoracic injuries so that the cough reflex will not be obtunded. The drug is contraindicated in craniocerebral trauma. Patients who are in shock do not absorb morphine given intramuscularly satisfactorily. Because of this they may receive too large a dose or multiple doses for control of pain without success. When the peripheral circulation is improved by resuscitation, the morphine deposited into the tissues will be absorbed and morphine poisoning supervenes. For control of pain in patients with wound shock, intravenous administration of a small dose is preferred.

MEDICAL MANAGEMENT IN FORWARD HOSPITALS

Neurosurgery: A pressing problem during the early months of the conflict was the care of neurosurgical casualties. The principle of early surgical care for these patients was well established from accumulated experience in previous wars. It was well known that neurosurgical wounds should be debrided; devitalized tissue and foreign material removed, particularly indriven bone fragments; hemostasis assured; dura closed by fascial graft, if necessary, and the scalp sutured. There was never any doubt but that the management of neurosurgical casualties could best be done by surgeons with experience in this field. Until, however, such surgeons were made available, it was necessary to do as well as possible under the circumstances.

The deficiency of neurosurgical personnel has been alleviated. Teams are now established in forward areas to which neurosurgical casualties are dispatched for expert management. Neurosurgeons aboard U. S. Navy hospital ships and the Danish Hospital Ship have given great support to the ground forces during critical phases of the campaign prior to and since the establishment of neurosurgical teams in Korea.

Maxillo Facial Injuries: Maxillo facial injuries, in contrast to the general principle of delayed sutures of war wounds, should be closed primarily. Preserve all viable and excise only devitalized tissue. Buccal mucosa should be sutured separately with absorbable material. Approximate muscles and skin accurately and make ample provision for adequate drainage; stab wound dependent drainage is very effective. Moist pressure dressings applied post-operatively are very helpful.

Tracheotomy should be performed without hesitancy when obstruction of the air way exists or is likely to develop. Hold these patients in forward hospitals until evacuation can be done safely.

Neck Injuries: Exploration and debridement are necessary when it is likely that the esophagus, trachea, larynx, epiglottis, hypo-pharnyx, etc., are lacerated. Defects in these structures should be carefully repaired and provision made for suitable drainage. Perform tracheotomy when laceration of the larnyx or trachea is present or when obstruction of the air way by existing or impending edema threatens.

Thoracic Wounds: The indications for exploratory thoracotomy are delineated succinctly in TB MED-147. It is clear, therefore, that most penetrating and perforating wounds of the thorax are managed best by conservative measures including frequent aspiration of air and blood without air replacement using needle and syringe. This method to be successful must be done early in forward hospitals and at least once daily until all air and blood have been removed and the lung expanded completely.

Many cases of hemothorax have been treated by intercostal tube underwater seal drainage. This method was preferred by some surgeons because it appeared to be simple and safe. When large numbers of casualties were treated in a hospital, the method was employed to save time. Some surgeons were of the opinion that the results of intercostal tube drainage were as good if not better than needle and syringe aspiration.

It has demonstrated beyond doubt that many more complications, including empyema and clotted hemothorax, developed in patients with hemothorax treated by intercostal tube drainage than in those by simple multiple needle and syringe aspirations.

The thoracic surgical service at Tokyo Army Hospital has prepared a chart of some patients who had thoracotomies within the first 24 hours after sustaining thoracic injuries. We are indebted to Major Anibal R. Valle and Lt. Wilfrid A. Cloutier for their kindness in providing this information. This chart is published to give the forward surgeons information as to the subsequent course of patients with thoracic injuries. Review of these cases will be of assistance to surgeons in the theater.

Abdominal Wounds: X-ray films of the chest and abdomen give the surgeon useful information that he can ill afford to neglect. When missiles are retained some idea of the structures possibly injured as they traversed the abdomen may be obtained from considering the point of entrance and the location of the missile as depicted by the X-ray. Too much reliance cannot be placed on this, however, since missiles notoriously may take a bizarre course and may ricochet after striking bone.

The abdomen should be explored when a missile conceivably could have perforated a hollow viscus. It is better to know than to take an unnecessary chance.

The best incisions for exploration of the abdomen are the right or the left pararectus or the mid-line. These incisions are readily made, readily extended upward or downward in accordance with what is found and what needs to be done. Transverse incisions take longer to make and to close. If wound infection supervenes, they are more difficult to handle. Exteriorization of damaged colon may be technically compromised because it may have to be done through the incision and serious infection may result. It is always preferable to exteriorize injured colon through a separate muscle splitting incision well away from that made for exploratory laparotomy to decrease the chance of subsequent serious infection. Such may be impossible when a transverse incision has been made.

Subcostal incisions are also unsatisfactory for missile wounds of the abdomen unless the surgeon is absolutely certain that the injury is confined to the region exposed by it. If it is found necessary to explore other regions and repair damage to other structures, the surgeon is embarrassed and it may be necessary to make another incision.

Layer closure of the abdomen including the skin in the presence of contamination from intestinal contents invites serious wound infection. It is safer to place non-absorbable sutures through the entire abdominal wall and thus approximate the margins of the wound. Stainless steel when used should be of large caliber to decrease the risk of cutting through the layers of the abdominal wall. It should be twisted in such a manner that it can be unloosened and retwisted should later inspection of the wound indicate the suture is too tight.

Explore the abdomen systematically, rapidly and completely, thus insuring that important injury be not overlooked. Control hemorrhage, tag injuries suitably, and proceed with the operation in an orderly manner.

Following repair of lacerated liver, drain the abdomen to prevent accumulation of bile. When an associated laceration of the diaphragm is present drain the subphrenic space to protect the suture line against stress and avoid thoraco-biliary fistula (Dr. Frank Berry). Drain through separate stab wound rather than through the laparotomy incision. Drain the lesser sac for wounds of the pancreas and the perirenal space for wounds of the kidney and after nephrectomy.

Exteriorize perforated colon and perform colostomies after adequately mobilizing the bowel to avoid tension and subsequent retraction, and always through separate muscle splitting incision well away from the laparotomy incision. Avoid making colostomies in close proximity to suprapubic cystostomy. Use the transverse colon if a defunctioning colostomy for injury to lower bowel segment and rectum must be done simultaneously with drainage of the bladder.

Wounds of the rectum may be present when missiles penetrate the abdomen, buttocks, and thighs and on occasions have been overlooked completely until belated complications have become manifest. Digital, and if necessary proctoscopic, examination must be done to establish the diagnosis. When the rectum has been injured, defunctioning colostomy and pararectal drainage must be accomplished. Posterior drainage to be effective requires a substantial incision on one or both sides of the sacrum and coccyx to enable free exposure of and dissection through the fascia propria.

Genito-urinary wounds: Splint the severed urethra at the time of supra-pubic cystostomy by catheter introduced from below through the urethral meatus or from above through the bladder. Suture the laceration over the catheter if this is possible.

Suprapubic cystostomy tube should be placed as high in the fundus as feasible to prevent pressure necrosis, infection of the symphysis publis and injury to the trigone.

It is fortunate if ureteral laceration can be discovered and repaired during initial surgery. Anastomosis over indwelling ureteral catheter and drainage of the area may forestall serious complications.

Preserve all viable portions of the external genitalia. The decision to emasculate patients should in most cases be made in a hospital to the rear. Cover the exposed testicle with tissues available and provide suitable drainage.

Nephrectomy need not be undertaken except in hopelessly damaged kidneys and renal pedicles. A conservative policy, including drainage, when only a portion of the kidney is injured reflects wisdom. Careful observation of the subsequent course of the patient may or may not indicate the need for another operation for continuing hemorrhage or infection. But many kidneys have been saved by conservative treatment.

Extremities: Circumcising skin about wounds of entrance and exit is a futile gesture. Stuffing wounds with gauze in the vain hope of promoting drainage is a snare and a delusion. Exploring wounds solely by the finger is scarcely even a sop to the surgeon's conscience. Interest and sincerity in the patient's welfare demand of the surgeon pride and craftsmanship in the discharge of his responsibilities, albeit a missile wound may seem prosaic to him. There

is no substitute for competent wound surgery.

Padding under casts must be abundant to forestall pressure necrosis, nerve palsies and circulatory embarrassment of the extremities. Avoid circular dressings under casts like the plague and split casts to the skin before transporting the patient. Bivalve and remove the upper half whenever casts are required for extremities with compromised circulation. Avoid windows in casts through which soft tissues may herniate during transportation.

Recognize, record and institute interim therapy for nerve injuries. A modicum of astuteness will readily discover the vast majority of traumatic interruptions of nerve function.

Splint hands in position of optimium function when necessary and evacuate at the earliest possible time. Do not sacrifice parts of the hand except for massive infection, saving of life or limb, or ascending infection. Later reconstructive procedures may utilize tissues of the hand judiciously preserved at initial surgery. Stress restoration of function rather than restitution of structural alignment to the end that the patient has useful prehensile mechanism.

Physical therapy must not be limited to a brief daily session in a well equipped and well staffed department. However important such treatment may be, of much greater importance is what the patient himself contributes to his rehabilitation during the much larger part of the day. Restoration of function can be attained more rapidly and more completely by insisting that the patient take positive action towards this goal during much of his otherwise idle moments.

CONCLUSION

The writer has been privileged to witness the growth of the medical support of the United Nations effort in Korea during the past eighteen months. From a babe in swaddling clothes, Medical Service has matured into a vast organization composed of many personnel of many nations.

It is hoped this brief review of some of the achievements of the Medical Service in this campaign thus far and some of the problems encountered in the management of battle casualties will, in a small measure, help to point the way to even greater progress towards better surgical care of the wounded.

FALSE POSITIVE DARKFIELD FINDINGS IN THE PRESENCE OF CONDYLOMATA ACUMINATA

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EDITORIAL NOTE: The following article is considered appropriate and pertinent at this time as emphasis of the ever present problem of VD. The pitfalls into which the unwary or inexperienced may fall are evident and the necessity for demonstration of characteristic morphology and motility of Treponema pallidum are forcefully presented. The prevalence of spirochetes other than those of syphilis in venereal lesions is all too frequent and only by careful examination of fresh, properly collected material can an adequate diagnosis of primary syphilis be made.

In the past several months seven patients with condylomata acuminata (verruca acuminata, venereal wart) were referred to the venereal disease section of the 12th Medical Dispensary for treatment as primary syphilis. Diagnosis in these cases had been made on the finding of what appeared to be Treponema pallidum on Darkfield examination made from the condylomata. It should be noted in this paper that these cases are not clinical luetic infections and should not be treated as such.

There have been a total of thirty-one patients with condylomata acuminata from the surface of which we have been able to demonstrate repeatedly these organisms that appear to be Treponema pallidum, and which we call "T.P.-like" organisms. In each instance the patient was required to wash his penis with water for fifteen (15) minutes and then for five (5) minutes with normal saline solution. The organisms were demonstrated in the serous exudate expressed from the condylomata. Seven of these cases had previously received anti-luetic therapy. All thirty-one of these cases have been followed serologically for periods varying from two to six months. In no instance has a patient developed a positive serological test for syphilis or has had clinical evidence of the disease.

Seven cases of condylomata acuminata were treated with massive doses of penicillin. They have consistently shown these spirochetes after treatment and have never presented serologic or clinical evidence of the disease. Case No. 1 is taken from this group.

CASE NO. 1. Cpl JMS was first seen on the 6th of April 1951. He presented numerous condylomata acuminata on the prepuce. No other penile lesion or inguinal adenopathy was present. The Darkfield examination revealed organisms with the morphological characteristics of Treponema pallidum. The cardiolipin flocculation test for syphilis was negative. During the following ten days he received six million (6,000,000) units of penicillin in oil and beeswax. The day following completion of therapy Darkfield examination revealed what appeared to be Treponema pallidum. The patient received another course of penicillin in oil and beeswax totaling six million (6,000,000) units. Upon completion of this course the same organisms as seen previously were still demonstrable in the Darkfield preparations from the condylomata.

Two months later it was still possible to demonstrate these organisms. At this time a circumcision was done on the patient at the 21st Evacuation Hospital. Pathologic examination (silver stain) of the specimen failed to reveal the presence of spirochetes. The patient has been followed for a period of two months since surgery. He has had no recurrence of the condylomata, has shown no clinical signs of syphilis and the cardiolipin flocculation test for syphilis has remained negative.

There have been seventeen cases of condylomata acuminta and the described spirochete resembling Treponema pallidum which have cleared completely with local treatment (salt soaks and/or podophyllum). They have received no anti-luetic treatment. No clinical or serologic evidence of the disease has developed in any patient. Case No. 9 is typical of this group.

CASE NO. 9. PFC KWS was referred to this dispensary for Darkfield examination on the 16th day of May 1951. He had numerous large condylomata acuminata on the prepuce. No penile ulcer or inguinal adenopathy was present. Organisms morphologically resembling Treponema pallidum were seen in the condylomata on Darkfield preparation made from them. The cardiolipin flocculation tests for syphilis were negative. This patient received no anti-luetic therapy. He was followed with weekly serologic tests until the 4th of October 1951 when he was referred to the 3d Station Hospital for circumcision and excision of the condylomata. Pathologic examination (silver stain) did not reveal the presence of spirochetes in the tissue. At no time has this patient shown clinical or serologic evidence of syphilis.

Seven cases were seen with condylomata acuminata which were thought to be Darkfield positive at the medical installations referring them for treatment. These cases consistently showed the "T.P.-like" organisms but were clinically and serologically negative. No anti-leutic treatment was administered. Case No. 13 is taken from this group.

CASE NO. 13. Sgt RDH was referred to this dispensary from a nearby medical installation for treatment of primary syphilis because of the finding of a positive Darkfield. The patient had multiple condylomata acuminata on the prepuce and the glans penis. There was no inguinal adenopathy or penile ulcer. Repeated Darkfield examinations revealed organisms that morphologically appeared to be Treponema pallidum. The cardiolipin flocculation tests for syphilis were negative and anti-luetic therapy was not given. Two months later the patient was referred to the 21st Evacuation Hospital and the condylomata were excised and the patient circumcised. Pathologic examination of the tissues did not demonstrate any spirochetes in them. The patient remained asymptomatic and serologically negative. He is still under observation.

We are not prepared to say whether or not the organisms we have seen in these thirty-one cases are of the definite strain Treponema pallidum, and if so, that they are pathogenic. In the three cases described above we were unable to demonstrate any invasion of the tissues by the spirochetes. An attempt to produce a syphilitic lesion in a rabbit with inoculum from a condyloma was unsuccessful. We believe that the organism exists as a saprophyte in the numerous depths and crevices of the condyloma and is nurtured by the ideal environment of darkness, warmth and smegma, but bears no relation to the growth or development of the condyloma.

The normal flora beneath the prepuce contains many spirochetes readily distinguishable from Treponema pallidum. Noguchi has isolated from a condyloma of man an organism, Treponema calligyrum, which has many of the characteristics of Treponema pallidum. Noguchi and others (see references) have demonstrated and described several non-pathogenic strains of Treponema pallidum. We are attempting at present to classify this organism.

SUMMARY. Three typical cases have been taken from thirty-one cases that presented multiple condylomata acuminata which showed, on Darkfield examination, spirochetes morphologically resembling Treponema pallidum. Seven of these cases had been referred to us for treatment as primary syphilis and seventeen cases were initially seen in this dispensary. None of the twenty-four cases have received anti-luetic therapy. An additional seven cases received anti-luetic therapy but persisted in showing the spirochete. None of these thirty-one cases have developed clinical or serologic evidence of syphilis.

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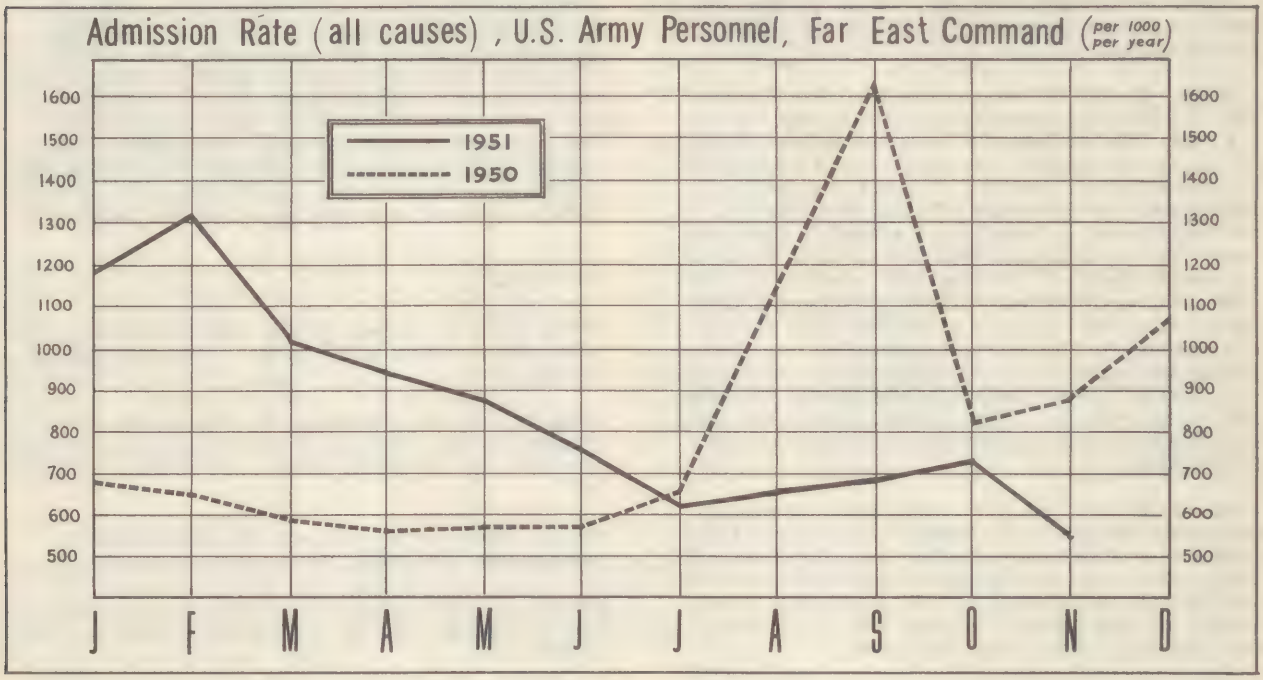
HEALTH OF ARMY TROOPS, FEC



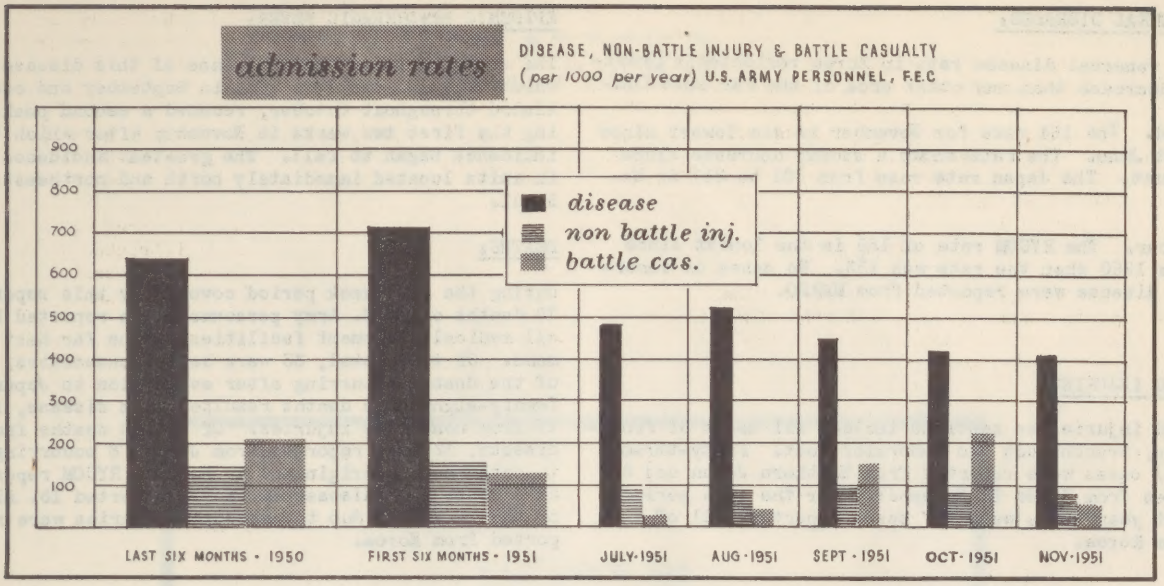
Admission rates per 1,000 troops per annum, Army Personnel, for the four-week period ending 28 November 1951, were as follows:

	FEC	JAPAN	KOREA	MARBO	PHILCOM (AF)	RYCOM
All Causes	552	458	607	272	266	437
Diseases	407	393	416	159	248	392
Injuries	92	64	108	113	18	45
Battle Casualties	54	.10	83	0	0	0
Psychiatric	27	15	34	0	0	4.2
Common Respiratory Diseases and Flu	67	102	50	34	46	70
Primary Atypical Pneumonia	1.4	1.6	1.4	0	9.2	0
Bacillary Dysentery	.85	0	1.2	0	18	0
Amebiasis	.82	.83	.86	0	0	0
Malaria, new	3.5	2.7	3.7	0	46	1.1
Infectious Hepatitis	7.9	7.5	8.0	0	0	13
Dermatophytosis	2.8	3.2	2.4	45	0	4.2
Rheumatic fever	.23	.21	.25	0	0	0
Venereal Diseases	173	217	154	0	55	155
			DAILY NON-EFFECTIVE RATE			
All Causes	30	70	11	11	36	11

ALL CAUSES ADMISSION RATE:

The admission rate of 552 for November is the lowest all causes rate for admission to medical treatment facilities in the Far East Command since the beginning of the Korean confliot. Medical treatment facility "admissions" include all patients admitted to hospitals, infirmaries, dispensaries or on a sick-in-quarters status and not returned to duty before midnight of the day of first reporting for medical care. Except for RYCOM, where the rate remained the same, all other areas in the command reported decreases. The greatest decline took place in Korea, from 874 to 607 for November, due to reduction in the number of battle casualties.

The rate of admission due to disease decreased from 427 in October to 407 in November. Japan and MARBO reported the most substantial decreases. The RYCOM rate increased slightly. Throughout the Far East Command no noticeable changes occurred in the rates for common respiratory diseases, influenza and infectious hepatitis, while decreases are noted in malaria and dysentery. The rate for pneumonia increased from 6.5 in October to 6.9 in November. Five



cases of encephalitis, 1 case of poliomyelitis and 2 cases of meningitis were reported throughout the command. No epidemic of scarlet fever, measles, mumps or smallpox were reported during November. Diseases of the skin and cellular tissues, dental diseases and conditions, diseases of the eye, ear, nose and throat and various other chronic and undiagnosed conditions continue to be principal contributors to morbidity in Army troops.

The nonbattle injury rate increased from 86 for the previous month to 92 for November. Only slight increases occurred in Korea and Japan, while PHILCOM (AF) and RYCOM reported decreases. The rise in the rates for MARBO and an increase in cold injuries is responsible for the higher rate in nonbattle injuries.

All conditions of ill-health caused by external agents, including acute poisoning, food infections due to non-bacterial poisoning and results of exposure to heat, cold or light are classified as nonbattle injuries. Injuries due to the elements (frostbite, trench foot and immersion foot) are also considered to be nonbattle injuries.

There appears to be no consistent pattern for the comparison in the rise and decline of nonbattle injuries to battle casualties. The Korea battle casualty rate for November dropped from 342 in October to 83 in November, while the nonbattle injury rate rose from 103 to 108 for the same period. There has been a substantial decrease in the nonbattle injury rate throughout the year.

DAILY NON-EFFECTIVE RATE:

The effect of the loss of time due to sickness, injury and wounds on the manpower of the Army is expressed as the "daily non-effective rate," and is given for a specified period such as a week, month or year. The rate as calculated indicates the average number of men out of each 1,000 strength who are constantly absent from duty for medical reasons. The rate has little significance in an active theater of combat operations inasmuch as it is greatly influenced by evacuation of patients. Patients evacuated from the combat zone are no longer chargeable against the non-effective rate of the combat zone, but become chargeable against the non-effective rate of the communications zone or the zone of the interior. It is obviously affected by the evacuation policy and the intensity of combat. The evacuation of patients from Korea to Japan and the United States tends to result in a low non-effective rate for Korea and a high rate in Japan. A comparison of such rates among the major commands in FECOM is not justified. The overall rate for FECOM was 30 per 1,000 for the month of November. This means that within the command, 3% of the strength was constantly absent from duty for medical reasons.

DISEASES:

COMMON RESPIRATORY DISEASES AND INFLUENZA:

The Far East Command rate of 67 remained the same as for the previous month. In 1950, the November rate was 64 with sharp rises in both December and January. The Japan rate decreased from 114 to 102 for November while Korea reported an increase from 45 to 50.

PSYCHIATRIC:

A substantial decrease in the Far East Command psychiatric rate is noted for November. This decrease is a reflection of the lowered rate in Korea, which dropped from 55 in October to 34 in November. The Japan rate of 15 remained the same as for the previous month. The RYCOM rate decreased from 7.5 to 4.2. PHILCOM (AF) and MARBO reported no cases of psychiatric conditions for November.

MALARIA:

During the month of November the incidence of new cases of malaria was 3.7 per 1,000 in Korea, and 2.7 per 1,000 in Japan. Both rates are somewhat higher than for November 1950. The administration of chloroquine as a suppressive in Korea, originally scheduled for discontinuation on November 15th, was continued throughout the month.

INFECTIOUS HEPATITIS:

Only slight increases occurred in the incidence of infectious hepatitis throughout the Far East Command. The November rate is 7.9. The increase in Korea offset the slight decrease in Japan. The Korea rate of 8.0 for November 1951 is low in contrast to the high rate of 17 for November 1950. The RYCOM rate remains at 13. Again, PHILCOM (AF) and MARBO report no cases.

VENEREAL DISEASES:

The venereal disease rate in Korea reflected a greater decrease than any other area of the Far East Command. The 154 rate for November is the lowest since last June. The rate shows a steady decrease since August. The Japan rate rose from 201 to 217 in November. The RYCOM rate of 155 is the lowest since June 1950 when the rate was 133. No cases of venereal disease were reported from MARBO.

COLD INJURIES:

Cold injuries as reported include all cases of frostbite, trench foot and immersion foot. Fifty-three (53) cases were reported from Northern Japan and 268 cases from Korea in November. For the same period last year there were 267 cases reported, all of them from Korea.

EPIDEMIC HEMORRHAGIC FEVER:

The second rise in the incidence of this disease which began in the last week in September and continued throughout October, reached a second peak during the first two weeks in November, after which the incidence began to fall. The greatest incidence was in units located immediately north and northeast of Seoul.

DEATHS:

During the four-week period covered by this report, 78 deaths of U. S. Army personnel were reported by all medical treatment facilities in the Far East Command. Of this total, 33 were battle casualties, 3 of the deaths occurring after evacuation to Japan. Twenty-eight (28) deaths resulted from disease, and 17 from nonbattle injuries. Of the 28 deaths from disease, 12 were reported from Japan, 8 occurring in cases having originated in Korea. RYCOM reported 1 death from disease and Korea reported 15. All of the 17 deaths due to nonbattle injuries were reported from Korea.

HOSPITALIZATION: (These data cover all patients, Army, Air Force and others.)

The percent of designated beds and operating beds in Army Hospitals occupied as of 28 November 1951 was as follows:

	Percent of Designated Beds Occupied	Percent of Operating Beds Occupied
JAPAN	66	81
KOREA	53	45
MARBO	6.0	3.1
PHILCOM (AF)	54	47
RYCOM	50	56
FEC	62	67

The bed status as of 28 November 1951 was as follows:

	Designated Beds	Operating Beds	Average Beds Occupied: All Patients Army Hospitals	Average Beds Occupied: Army Patients USAF Hospitals
JAPAN	13,300*	10,933	8,820	522
KOREA	4,500	5,282	2,384	6
MARBO	200	390	12	0
PHILCOM (AF)	100	116	54	4
RYCOM	400	356	200	0
FEC	18,500	17,077	11,470	532

In Korea, there were 13,000 PsW operating beds, 9,204 of which were occupied.

(*Includes 2,000 TD Beds)

EVACUATION:

Tabulated below is the number of patients (all types of personnel) evacuated from the major commands to the ZI during the five report weeks in November and the number of patients awaiting evacuation as of 30 November 1951:

	By Air	By Water	Total	Patients Awaiting Evacuation
JAPAN	1,741	11	1,752**	127
MARBO	2	0	2	1
PHILCOM (AF)	15	0	15	11
RYCOM	44	1	45	23
FEC	1,802	12	1,814	162

(**1,420 patients originated from Korea)

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EDGAR ERSKINE HUME
Major General, USA

1889 - 1952

Born in Frankfort, Kentucky, 26 December 1889, died at Walter Reed Army Hospital, 24 January 1952.

Graduated from Centre College, Kentucky, BA, 1908, MA, 1909; Johns Hopkins University, Doctor of Medicine, 1913; University of Munich, 1914; University of Rome, 1915; Master of Public Health, Harvard University and Massachusetts Institute of Technology, 1921; Harvard School of Tropical Medicine, 1922.

Appointed first lieutenant, Medical Corps, RA, January 1917. Promoted to Major General while serving as the Chief Surgeon, Far East Command, 30 May 1949.

A Fellow of the American Academy of Arts and Sciences, The American College of Surgeons, the American College of Physicians, the Royal Society of Edinburgh and other societies including the Academies of Medicine in Washington, Rome, Madrid, Mexico, Rio, Lima and Buenos Aires. Diplomate of the American Specialty Boards for Neurology, for Internal Medicine, and for Preventive Medicine and Public Health.

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The Chief Surgeon extends an invitation to all Far East Command medical personnel of the U. S. Army, Navy and Air Force, or of the United Nations, to prepare and forward with view to publication, articles of professional or administrative nature. It is assumed that editorial privilege is granted unless author states otherwise.

Capt. Charles A. Copeland, MSC EDITOR

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